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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/635,413 | 08/05/2003 | Kazuhiko Yoshida | JCLA11963 | 3836 |
| 7590 | 08/25/2004 | | EXAMINER | |
| J.C. Patents Suite 250 4 Venture Irvine, CA 92618 | | | BINDA, GREGORY JOHN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3679 | |

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|---|-------------------------------|--------------------------------|
| Office Action Summary | Application No. 10/635,413 | Applicant(s) YOSHIDA ET AL. |
| | Examiner Greg Binda | Art Unit 3679 |
| <i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i> | | |
| Period for Reply | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. | | |
| <small> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). </small> | | |
| Status | | |
| 1) <input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>16 July 2004</u> . 2a) <input checked="" type="checkbox"/> This action is FINAL. 2b) <input type="checkbox"/> This action is non-final. 3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | |
| Disposition of Claims | | |
| 4) <input checked="" type="checkbox"/> Claim(s) <u>1-17</u> is/are pending in the application. 4a) Of the above claim(s) _____ is/are withdrawn from consideration. 5) <input type="checkbox"/> Claim(s) _____ is/are allowed. 6) <input checked="" type="checkbox"/> Claim(s) <u>1-17</u> is/are rejected. 7) <input type="checkbox"/> Claim(s) _____ is/are objected to. 8) <input type="checkbox"/> Claim(s) _____ are subject to restriction and/or election requirement. | | |
| Application Papers | | |
| 9) <input type="checkbox"/> The specification is objected to by the Examiner. 10) <input checked="" type="checkbox"/> The drawing(s) filed on <u>05 August 2003</u> is/are: a) <input type="checkbox"/> accepted or b) <input checked="" type="checkbox"/> objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) <input type="checkbox"/> The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | |
| Priority under 35 U.S.C. § 119 | | |
| 12) <input checked="" type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) <input checked="" type="checkbox"/> All b) <input type="checkbox"/> Some * c) <input type="checkbox"/> None of: 1. <input checked="" type="checkbox"/> Certified copies of the priority documents have been received. 2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____. 3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | |
| Attachment(s) | | |
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____. | | |

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Drawings

2. Figures 5 & 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
3. The drawings are objected to because reference numeral 3b appears in the specification but not in the drawings.
4. Applicant states in the amendment filed July 16, 2004 that corrected drawings that obviate the above objections were filed with the amendment. However, no such drawings have been received.
5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the

renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1 & 7 each recite "an induction hardened area is formed locally in the bottom portion of the mouth portion of said outer joint member". Applicant has not pointed out where the limitation "locally" is supported, nor does there appear to be a written description of the limitation in the application as originally filed.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 17, lines 1 & 2 recites the limitation, “an induction hardened area is formed in a base portion” it is not clear if this induction hardened area is the same as, or different from, the induction hardened area recited at the end of claim 7.

Claim Rejections - 35 USC § 102

10. Claims 1-6 & 15 are rejected under 35 U.S.C. 102(b) as being anticipated by *SAE Manual*. Fig. 1 shows a constant velocity joint comprising an outer joint including all the limitations of the claim. In the second column on page 149, the *SAE Manual* discloses that the surfaces of the outer joint member are hardened. Therefore the surfaces of the bottom, base and track portions of the outer joint member would be hardened. Unhardened portions remain under the hardened surface.

11. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Shimuzu et al, US 5,913,633 (Shimuzu). Figs. 1-4 show a constant velocity universal joint comprising an outer joint member including a bowl-shaped mouth portion 1 and a stem portion 5 with a serration 7 formed on an outer peripheral (see also col. 2, lines 39 & 40) thereof, the stem portion 5 extending from a bottom portion 10 of the mouth portion 1 in an axial direction, wherein an induction hardened area (see col. 2, lines 19-21) is formed in the bottom portion 10 of the mouth portion 1 of the outer joint member.

Claim Rejections - 35 USC § 103

12. Claims 7, 16 & 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *SAE Manual*. *SAE Manual* shows (see Fig. 1) a constant velocity joint having a shoulder portion having a diameter that is equal to or greater than the diameter of the serration portion. In the second column on page 149, the *SAE Manual* discloses that the surfaces of the outer joint member are hardened but does not disclose the depth of the hardening being set to 3mm or less. However, it would have been obvious to one of ordinary skill in the art to design the constant velocity joint so that the hardened portion is set to 3mm or less, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimuzu for the same reasons noted in item 12 above.

14. Claims 1-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Niebling et al, US 5,725,285 (Niebling)in view of *SAE Manual*.

a. Claims 1-6, 8-13 & 15. Figs. 1 shows a wheel bearing comprising all the limitations of the claim except Niebling does not expressly disclose hardening the surfaces of the bottom, base and track portions of the outer joint member 1. In the second column on page 149, the *SAE Manual* discloses hardening the surfaces of an outer joint member in order to provide required wear characteristics and torsional strength. It would have been obvious to one of ordinary skill in the art to harden the surfaces of the outer

joint member of Niebling in order to provide required wear characteristics and torsional strength as taught by *SAE Manual*.

b. Claims 7, 14 16 & 17. In addition to that noted in subparagraph 'a' above, it would have been obvious to one of ordinary skill in the art to design the constant velocity joint of the wheel bearing so that the base hardened portion is set to 3mm or less, for the same reasons noted in item 12 above.

Response to Arguments

15. Applicant's arguments filed July 16, 2004 have been fully considered but they are not persuasive.

a. Applicant argues that *SAE Manual* fails to show or suggest the claimed invention because it fails to teach or specify that the surface hardened area is formed locally in the bottom portion of the mouth portion of the outer joint member. However, *SAE Manual* specifies that the outer joint member is surface hardened which indicates that the surfaces of the outer joint member (including the bottom portion of the mouth portion) is hardened and so therefore the limitations of the claim are anticipated.

b. Applicant argues that Shimuzu fails to show the claimed invention because the hardened portion 10 is not a bottom portion of the mouth portion of the outer joint member. However, Fig. 3A shows that the hardened area is a bottom portion of the mouth portion of the outer joint member 1.

c. Applicant argues that the hardened portion 10 in Shimuzu is not a bottom portion because it is not perpendicular to the axis of the stem portion. However, the bottom

portion is not recited as being perpendicular to the axis of the stem portion in the claim.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

d. Applicant argues that the references fail to disclose an unhardened area sandwiched between hardened surfaces. However, the references disclose only hardening at surfaces. Therefore the area below each hardened surface and between (i.e. “sandwiched”) between these hardened surfaces is unhardened.

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3679

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Greg Binda
Primary Examiner
Art Unit 3679